SEQUENCE LISTING

<110> Masuda, Esteban
Liao, X. Charlene
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Chu, Peter
Pardo, Jorge
Rigel Pharmaceuticals, Incorporated

<120> TRAC1: Modulators of Lymphocyte Activation

<130> 021044-000600US

<140> US 09/998,667
<141> 2001-12-03

<150> US 60/282,432
<151> 2001-04-06

<160> 18

<170> PatentIn Ver. 2.1

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Cys His Ser Arg Pro Asp Glu Ser Pro Ser Thr Phe Asn Gly Ser Leu
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Leu Glu Val Tyr Glu Lys Pro Val Gln Val Pro Cys Gly His Val Phe
         35                  40                  45

Cys Ser Ala Cys Leu Gln Glu Cys Leu Lys Pro Lys Lys Pro Val Cys
     50                  55                  60
```

```
Gly Val Cys Arg Ser Ala Leu Ala Pro Gly Val Arg Ala Val Glu Leu
 65                  70                  75                  80

Glu Arg Gln Ile Glu Ser Thr Glu Thr Ser Cys His Gly Cys Arg Lys
                85                  90                  95

Asn Phe Phe Leu Ser Lys Ile Arg Ser His Val Ala Thr Cys Ser Lys
            100                 105                 110

Tyr Gln Asn Tyr Ile Met Glu Gly Val Lys Ala Thr Ile Lys Asp Ala
        115                 120                 125

Ser Leu Gln Pro Arg Asn Val Pro Asn Arg Tyr Thr Phe Pro Cys Pro
    130                 135                 140

Tyr Cys Pro Glu Lys Asn Phe Asp Gln Glu Gly Leu Val Glu His Cys
145                 150                 155                 160

Lys Leu Phe His Ser Thr Asp Thr Lys Ser Val Val Cys Pro Ile Cys
                165                 170                 175

Ala Ser Met Pro Trp Gly Asp Pro Asn Tyr Arg Ser Ala Asn Phe Arg
            180                 185                 190

Glu His Ile Gln Arg Arg His Arg Phe Ser Tyr Asp Thr Phe Val Asp
        195                 200                 205

Tyr Asp Val Asp Glu Glu Asp Met Met Asn Gln Val Leu Gln Arg Ser
    210                 215                 220

Ile Ile Asp Gln
225
```

<210> 9
<211> 245
<212> PRT
<213> Homo sapiens

<220>
<223> STRIN sequence with rign domain

<400> 9

```
Met Ala Glu Asp Leu Ser Ala Ala Thr Ser Tyr Thr Glu Asp Asp Phe
  1               5                  10                  15

Tyr Cys Pro Val Cys Gln Glu Val Leu Lys Thr Pro Val Arg Thr Thr
            20                  25                  30

Ala Cys Gln His Val Phe Cys Arg Lys Cys Phe Leu Thr Ala Met Arg
        35                  40                  45

Glu Ser Gly Ala His Cys Pro Leu Cys Arg Gly Asn Val Thr Arg Arg
    50                  55                  60

Glu Arg Ala Cys Pro Glu Arg Ala Leu Asp Leu Glu Asn Ile Met Arg
65                  70                  75                  80

Lys Phe Ser Gly Ser Cys Arg Cys Cys Ala Lys Gln Ile Lys Phe Tyr
                85                  90                  95
```

```
Arg Met Arg His His Tyr Lys Ser Cys Lys Lys Tyr Gln Asp Glu Tyr
            100                 105                 110

Gly Val Ser Ser Ile Val Pro Asn Phe Gln Ile Ser Gln Asp Ser Val
        115                 120                 125

Gly Asn Ser Asn Arg Ser Glu Thr Ser Thr Ser Asp Asn Thr Glu Thr
    130                 135                 140

Tyr Gln Glu Asn Thr Ser Ser Ser Gly His Pro Thr Phe Lys Cys Pro
145                 150                 155                 160

Leu Cys Gln Glu Ser Asn Phe Thr Arg Gln Arg Leu Leu Asp His Cys
                165                 170                 175

Asn Ser Asn His Leu Phe Gln Ile Val Pro Val Thr Cys Pro Ile Cys
            180                 185                 190

Val Ser Leu Pro Trp Gly Asp Pro Ser Gln Ile Thr Arg Asn Phe Val
        195                 200                 205

Ser His Leu Asn Gln Arg Arg Gln Phe Asp Tyr Gly Glu Phe Val Asn
    210                 215                 220

Leu Gln Leu Asp Glu Glu Thr Gln Tyr Gln Thr Ala Val Glu Glu Ser
225                 230                 235                 240

Phe Gln Val Asn Ile
                245
```

<210> 10
<211> 50
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:human TRAC1
(FLJ20456) ring finger domain

<400> 10

```
Val Thr Ser Phe Asp Cys Ala Val Cys Leu Glu Val Leu His Gln Pro
  1               5                  10                  15

Val Arg Thr Arg Cys Gly His Val Phe Cys Arg Ser Cys Ile Ala Thr
             20                  25                  30

Ser Leu Lys Asn Asn Lys Trp Thr Cys Pro Tyr Cys Arg Ala Tyr Leu
         35                  40                  45

Pro Ser
     50
```

<210> 11
<211> 50
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:human znf313
ring finger domain

<400> 11
Leu Gly Arg Phe Thr Cys Pro Val Cys Leu Glu Val Tyr Glu Lys Pro
1 5 10 15

Val Gln Val Pro Cys Gly His Val Phe Cys Ser Ala Cys Leu Gln Glu
20 25 30

Cys Leu Lys Pro Lys Lys Pro Val Cys Gly Val Cys Arg Ser Ala Leu
35 40 45

Ala Pro
50

<210> 12
<211> 50
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:human STRIN
ring finger domain

<400> 12
Glu Asp Asp Phe Tyr Cys Pro Val Cys Gln Glu Val Leu Lys Thr Pro
1 5 10 15

Val Arg Thr Thr Ala Cys Gln His Val Phe Cys Arg Lys Cys Phe Leu
20 25 30

Thr Ala Met Arg Glu Ser Gly Ala His Cys Pro Leu Cys Arg Gly Asn
35 40 45

Val Thr
50

<210> 13
<211> 50
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:human TRAF6
ring finger domain

<400> 13
Glu Ser Lys Tyr Glu Cys Pro Ile Cys Leu Met Ala Leu Arg Glu Ala
1 5 10 15

Val Gln Thr Pro Cys Gly His Arg Phe Cys Lys Ala Cys Ile Ile Lys
20 25 30

Ser Ile Arg Asp Ala Gly His Lys Cys Pro Val Asp Asn Glu Ile Leu
35 40 45

Leu Glu
50

<210> 14
<211> 50
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:human c-Cbl ring finger domain

<400> 14
Ser Thr Phe Gln Leu Cys Lys Ile Cys Ala Glu Asn Asp Lys Asp Val
1 5 10 15

Lys Ile Glu Pro Cys Gly His Leu Met Cys Thr Ser Cys Leu Thr Ser
20 25 30

Trp Gln Glu Ser Glu Gly Gln Gly Cys Pro Phe Cys Arg Cys Glu Ile
35 40 45

Lys Gly
50

<210> 15
<211> 50
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:human BRCA1 ring finger domain

<400> 15
Leu Glu Cys Pro Ile Cys Leu Glu Leu Ile Lys Glu Pro Val Ser Thr
1 5 10 15

Lys Cys Asp His Ile Phe Cys Lys Phe Cys Met Leu Lys Leu Leu Asn
20 25 30

Gln Lys Lys Gly Pro Ser Gln Cys Pro Leu Cys Lys Asn Asp Ile Thr
35 40 45

Lys Arg
50

<210> 16
<211> 50
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:human BAR ring finger domain

<400> 16
Val Ser Glu Phe Ser Cys His Cys Cys Tyr Asp Ile Leu Val Asn Pro
1 5 10 15

Thr Thr Leu Asn Cys Gly His Ser Phe Cys Arg His Cys Leu Ala Leu
20 25 30

Trp Trp Ala Ser Ser Lys Lys Thr Glu Cys Pro Glu Cys Arg Glu Lys
35 40 45

Trp Glu
50

<210> 17
<211> 49
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:human RAG1 ring finger domain

<400> 17
Lys Ser Ile Ser Cys Gln Ile Cys Glu His Ile Leu Ala Asp Pro Val
1 5 10 15

Glu Thr Asn Cys Lys His Val Phe Cys Arg Val Cys Ile Leu Arg Cys
20 25 30

Leu Lys Val Met Gly Ser Tyr Cys Pro Ser Cys Arg Tyr Pro Cys Phe
35 40 45

Pro

<210> 18
<211> 200
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:flexible linker

<220>
<221> MOD_RES
<222> (6)..(200)
<223> Gly at positions 6-200 may be present or absent

<400> 18
Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
1 5 10 15

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
20 25 30

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
35 40 45

```
Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
     50                  55                  60

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
 65                  70                  75                  80

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
                 85                  90                  95

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
             100                 105                 110

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
         115                 120                 125

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
     130                 135                 140

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
145                 150                 155                 160

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
                 165                 170                 175

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
             180                 185                 190

Gly Gly Gly Gly Gly Gly Gly Gly
         195                 200
```